

Request under the *Freedom of Information and Protection of Privacy Act*:

All records in BC Ferries Services possession, including studies contracted to all service providers, that:

Item 1: Contemplate reasons for or against operating ferry sailings less than one hour apart between Tsawwassen Terminal and Swartz Bay Terminal during peak periods (i.e., in the peak periods, why do ferry sailings take place one hour apart and not less)?

Response to:

Item 1: BC Ferries does not have responsive records within the timespan of this request. You might be interested to know that BC Ferries' summer schedules from 1996 and 1997 included certain sailings on the half hour as there were five vessels on the Tsawwassen to Swartz Bay at that time. We do not have readily available records detailing what circumstances resulted in the change in summer 1998 to four vessels on Route 1 or the discontinuation of the sailings on the half hour.

In recent years, traffic has increased considerably across the ferry system, in particular on our routes connecting the lower mainland and Vancouver Island, including our Tsawwassen to Swartz Bay route. BC Ferries understands that customers might experience challenges with being able to travel on the sailing of their choice, and might encounter sailing waits at terminals. BC Ferries continues to monitor for opportunities to improve service to our customers, and factors this into short and long term planning.

out of scope

2.5.3 COST ESTIMATE – SINGLE VESSEL

The price of the conventional diesel vessel was estimated to be CADs. 17 [redacted] (2017) from a European shipyard and CADs. 17 [redacted] from a Canadian shipyard. The estimated cost of the conventional diesel propulsion system includes the cost of an SCR for emission compliance.

The price to equip the vessel with a dual-fuel LNG propulsion system is an additional cost of CADs. 17 [redacted] bringing the total cost to CADs. 17 [redacted] from a European shipyard and CADs. 17 [redacted] from a Canadian shipyard. The estimated cost of the dual-fuel propulsion system includes the cost of modifying the ship from diesel mechanical to diesel-electric.

The price to equip the vessel with a gas-hybrid system incurs an additional cost for the energy storage system. The gas-hybrid propulsion system assumes that the energy storage system will replace one of two main generators in the baseline ship’s 8,514kW of installed power at 80% MCR, for a 40 minute voyage, as explained in Section 2.2. This is equivalent to a total of 2,270 kilowatt hours. The additional cost of the energy storage system is CADs. 17 [redacted] bringing the total cost to CADs. 17 [redacted] from a European shipyard and CADs. 17 [redacted] from a Canadian shipyard.

The cost estimates for the 310 AEQ Major Class ferry for all propulsion options in each shipyard location is summarized in Table 14.

Table 14: Cost Estimate for 310 AEQ Major Class Single Vessel

Propulsion Option	Cost in CAD\$M per Shipyard Location			
	Canada	South America	Europe	Asia
Conventional diesel-electric	s. 17 [redacted]	[redacted]	[redacted]	[redacted]
Gas-electric	[redacted]	[redacted]	[redacted]	[redacted]
Gas hybrid (LNG/stored energy)	[redacted]	[redacted]	[redacted]	[redacted]

APPENDIX B TERMINAL CLASS DESIGN REQUIREMENTS

out of scope

Category		Sub-category	Major
Safety & Security		Integration of safety and security features	Yes
Berths		Number of Berths and Berth Interface Type	1 Major per Major vessel route; 1 MIM per MIM vessel route; 1 Major if hub or storage planned
Ticketing		Ticketing Function	Yes + toll booth canopy and plaza
		Self-ticket Kiosks	Yes
		Turnstiles at embarkation and fee paid entry zone	Yes
Vehicle Holding Areas		Pre-ticket Area	Yes
		AEQ Capacity	2x sum of AEQ of largest vessel for each route
		Lane Widths	Two - (1) commercial; (2) regular
Vehicle loading and unloading		Control Tower	Yes
		Loading and Unloading	Double deck for berths intended for double deck ship operations. MCD - Regular vehicles - double lane discharge; Commercial vehicles - double lane discharge. Upper Car Deck (UCD) - double lane discharge
Customer Amenities	Foot (F) & Vehicle (V)	Waiting rooms/lounges and washrooms	Waiting lounges and washrooms
		Satellite washroom building	Yes
		Covered outdoor waiting space, seating and picnic tables	Yes
		Customer Service Counter	Yes
		Retail Facility	Multi-tenant Market
		Public Notice Board	Yes
		ATM	Yes
		Vending	Yes
		Distress Phones	Yes
		Water fountains / bottle filling station (if potable water available)	Yes
	V-Only	Playground, Pet Areas	Yes
		F-Only	Baggage Service (drop-off, handling and transport to vessel)
	Escalator, Elevators		Yes
	Enclosed walkway to berths after ticketing		Yes
	Pick-up / drop off zone		Yes - ideally on the same level
Parking	Yes - paid - short and long term, disabled		
		Bus Bays (community, school, charter and shuttle), Taxis and Car Co-op (leased space)	Yes
Communications and IT Infrastructure		Wayfinding (static); reader boards	Yes
		Public Address System	Yes
		Electronic Tollbooth Signage	Yes
		Vehicle Classification System	Yes
		Standard BCF IT systems & capacities and server room	Yes
		Customer WI-Fi	Yes
Administration & Employee Facilities		Ticket Office	Yes - part of toll plaza
		Admin Offices, Meeting Rooms and Crew Mess	Yes - Terminal Admin and Regional Support
		Crew/Employee and Visitor Parking	Yes - peak deployment x 2 watches (1 primary parking lot)
Other Terminal Services		Fleet Support Unit	Yes
		Warehouse / Cross docking	Yes
		Storage for Terminal Ops, Terminal Maintenance and Fleet Ops	Yes
		Drop Trailer - holding area, vessel staging area and office	Yes
		Simulator and Training Room	Yes
		Bicycle Access/Egress/Storage	Yes
Utilities & Miscellaneous		Compactors	Yes - industrial scale - vehicles to pick up
		Environmental & containment for hazardous goods	Yes and transportable booms
		Generators	Multiple to operate ramps
		Potable water supply	Yes
		Septic field or sewage treatment system. Convey to municipal where possible	Pump ashore for vessels; conveyance to municipal treatment system
		Pump ashore	Yes - where infrastructure exists
		Shore to ship power - at home ports only	Yes
		Ship to shore power	Yes